

## BOOK REVIEW

**Clinical Research in Diabetes and Obesity, vol. I: Methods, Assessment and Metabolic Regulation, vol. II: Diabetes and Obesity**

edited by B. Draznin and R. Rizza. Humana Press, New Jersey USA, April 1997. No of pages 408 each. Price \$139.50 each, hardback. ISBN Vol. 1 0 89603 350 3; Vol. 2 0 89603 492 5

Clinical research in diabetes and obesity is a two volume multi-author text which aims to provide a comprehensive overview of clinical metabolic research in Type 2 (non-insulin-dependent) diabetes and obesity. The editors have assembled an impressive array of authors from around the world, albeit with a North American bias, many of whom will be familiar to readers.

The subject material divides neatly into the two volumes. The first volume introduces the techniques commonly used in metabolic clinical research. In turn, this volume is subdivided into three sections. Part I is a critical evaluation of many of the methods presently used in such studies, with 'cornerstone' chapters on measurement of insulin sensitivity, beta cell sensitivity and glucose effectiveness. Other chapters on the assessment of substrate and energy metabolism, fat and protein metabolism and the measurement

of hepatic carbohydrate metabolism complete a comprehensive snapshot of the most commonly used contemporary techniques in this field.

Part II of volume I deals with the physiology of hormonal effects on substrate metabolism, with chapters on the effects of insulin, glucagon, glucocorticoids and growth hormone. A chapter on central nervous system metabolism and its interactions with peripheral metabolism completes this section, although this reviewer felt that this should perhaps have been included in part III which looks at whole body regulation of metabolism in humans. This final section of volume I is mostly concerned with describing the physiology of the postabsorptive and postprandial states, although chapters on exercise and counterregulation are also included. An eloquent chapter by Roy Taylor and Gerald Schulman on the use of NMR spectroscopy is worthy of particular mention.

Volume II is the companion volume, directed primarily at Type 2 diabetes. Again it is subdivided into three sections. The first part deals with obesity, and even the briefest of scans through these five chapters reminds us of how much we have still to learn about the causes and the management, of obesity. Part two (Type 2 diabetes) makes up the bulk of this volume. Chapters on insulin secretion, insulin action and insulin sensitivity, glucose toxicity and the genetics of Type 2DM epitomize many of the unresolved questions in research into the aetiology of this disease. Chapters on dyslipidaemia, exercise, sympathetic activity and vascular

tone complete the section. Finally part III looks at other insulin resistant states such as polycystic ovarian syndrome, syndrome X, 'severe insulin resistance' syndromes, and hypertension. Chapters on the dietary management of NIDDM and obesity in part III would probably have been better placed in parts II and I, respectively.

The editors have largely managed to avoid the pitfalls of multi-author texts with a largely consistent style and little duplication between chapters. To allow such a breadth of work to be covered necessitates the chapters providing overviews rather than fully comprehensive reviews of topics, and therein lie both the strengths and weaknesses of these volumes.

Who will be the likely readers of such a publication? The first volume, and especially part I, provides an excellent summary of methods used in clinical metabolic research and these will probably be the chapters that will have the widest appeal. The second volume in particular becomes more esoteric, and as with other similar texts, will inevitably become dated more quickly. Ultimately most who are even peripherally involved in diabetes research, whether clinical or not, will find something of interest between the covers. However few will feel the need to add both volumes to their personal library.

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